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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,508	02/19/2002	Hideaki Yoshida	219891US2 DIV	5405

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
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EXAMINER

TANG, MINH NHUT

ART UNIT PAPER NUMBER

2829

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,508

Applicant(s)

YOSHIDA ET AL.

Examiner

Minh N. Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/862,414.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/862,414, filed on May 23, 1997.

Oath/Declaration

2. In the Declaration, the signature of the seventh joint inventor appears inconsistent with the typed name, i.e., the signature name is Kato whereas the typed name is Katou. Clarification is required.

Drawings

3. The corrected or substitute drawings (Paper No. 3) were received on 6/19/2002. These drawings are approved.

Specification

4. The Preliminary Amendment filed on 02/19/2002 (Paper No. 5) has been entered.
5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (U.S.P. 5,673,477) in view of McQuade et al. (U.S.P. 5,416,429).

As to claim 1, Hattori et al. disclose, in Fig. 16(a), a probe device (37) comprising: a film (3); a plurality of wiring patterns (4a, see column 12, lines 2-3) formed on a first surface (i.e., lower surface) of the film (3), each wiring pattern (4a) having a front end portion (38) projecting out from the first surface (lower surface) of the film (3) in a direction parallel to the first surface (lower surface) of the film (3) so as to form contact pins (38, 40, 2); wherein the plurality of contact pins (38, 40, 2) include a fabricated bending point (39) at a middle portion in an axial line direction with a Ni plating treatment (see column 5, lines 60-65). Hattori et al. do not show a metal layer provided on a second surface of the film (3). McQuade et al. disclose, in Figs. 5 and 6, a probe assembly comprising a plurality of wiring patterns (46, 48, 50) formed on a first

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surface (lower surface) of a film (45); a metal layer (44) provided on a second surface (upper surface) of the film (45) for serving as ground plane (see column 8, lines 5-15). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide on the upper surface of the film of Hattori et al. with a metal layer as taught by McQuade et al. in order to serve as ground plane.

As to claim 12, Hattori et al. disclose, in Fig. 16(a), a probe device (37) including a plurality of contact probes (4), each contact probe (4) comprising: a film (3); a plurality of wiring patterns (4a, see column 12, lines 2-3) formed on a first surface (lower surface) of the film (3), each wiring pattern (4a) having a front end portion (38) projecting out from the first surface (lower surface) of the film (3) in a direction parallel to the first surface (lower surface) of the film (3) so as to form contact pins (38, 40, 2); wherein the plurality of contact probes (4) are arranged such that the axial lines of the contact pins (38, 40, 2) are substantially vertical to a contact face (A) of an object of measurement, and the plurality of contact probes (4) are disposed in parallel (see Fig. 1) so as to provide spaces between respective faces (see Figs. 3(a) and 3(b)) of the films (3) of the plurality of contact probes (4), and wherein the plurality of contact pins (38, 40, 2) include a fabricated bending point (39) at a middle portion in an axial line direction with a Ni plating treatment (see column 5, lines 60-65). Hattori et al. do not show a metal layer provided on a second surface of the film (3). McQuade et al. disclose, in Figs. 5 and 6, a probe assembly comprising a plurality of wiring patterns (46, 48, 50) formed on a first surface (lower surface) of a film (45); a metal layer (44) provided on a second surface (upper surface) of the film (45) for serving as ground

plane (see column 8, lines 5-15). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide on the upper surface of the film of Hattori et al. with a metal layer as taught by McQuade et al. in order to serve as ground plane.

As to claim 13, Hattori et al. disclose in Fig. 16(a), a direction of bending (i.e., bent toward the inspected surface A of an object to be inspected) of the contact pins (38, 40, 2) of the plurality of the contact probes (4) when a buckling load is applied is configured to be substantially constant.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 12, and 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Higgins 5,521,518 Probe Card Apparatus.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh N. Tang whose telephone number is (703) 305-1652. The examiner can normally be reached on M-F (6:30-4:00) first Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Cuneo, Kamand can be reached on (703) 308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

A handwritten signature in black ink, appearing to be 'MT' with a long horizontal stroke extending to the right.

Minh Tang
April 28, 2003